



DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

[Docket No. FWS–HQ–MB–2020–0138; FF09M27000–212–FXMB123109EAGLE]

Eagle Permits; Updated Bald Eagle Population Estimates and Take Limits

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice.

SUMMARY: In December 2016, the U.S. Fish and Wildlife Service (Service, or we) completed a Programmatic Environmental Impact Statement (PEIS) wherein we evaluated biological data to establish maximum take limits for permits to take bald eagles in each of six eagle management units in the United States. In the PEIS, we committed to reevaluate biological data and reassess the take limits no less than once every 6 years. This notice is to inform the public that we have reviewed recent data and, using updated population and demographic models, are revising take limits for bald eagles effective immediately.

DATES: The maximum allowable take limits set forth in this document are effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Supplementary documents for this notice may be obtained from <http://www.regulations.gov> in Docket No. FWS–HQ–MB–2020–0138.

FOR FURTHER INFORMATION CONTACT: Brian A. Millsap, National Raptor Coordinator, Division of Migratory Bird Management, U.S. Fish and Wildlife Service, at 505–559–3963.

SUPPLEMENTARY INFORMATION:

Background

Our authority to authorize take of eagles is derived from the Migratory Bird Treaty Act (16 U.S.C. 703–712) and the Bald and Golden Eagle Protection Act (hereafter Eagle Act; 16 U.S.C. 668–668d). The Eagle Act further specifies that take of eagles may only be authorized

after a finding that the take is compatible with the preservation of the bald eagle or the golden eagle. Through regulations in part 22 of title 50 of the Code of Federal Regulations (CFR), the Service issues eagle take permits for several specific purposes, including scientific or Tribal religious purposes and preventing depredations on livestock and collisions with airplanes near airports. However, the majority of permits the Service issues to authorize take of eagles are for incidental take; that is, take that is associated with, but not the purpose of, a human activity (50 CFR 22.26). The definition of “take” under the Eagle Act includes “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb” (16 U.S.C. 668c; 50 CFR 22.3).

In 2016, we revised the permit regulations governing eagle incidental take (81 FR 91494, December 16, 2016). As part of that rulemaking action, we completed a biological status assessment for both bald and golden eagles and a Programmatic Environmental Impact Statement. These documents and other supporting information for the 2016 rule are available in Docket No. FWS–R9–MB–2011–0094 at <http://www.regulations.gov>. The 2016 rulemaking action and supplementary documents implemented the following actions:

(1) Established six eagle management units (EMUs) for bald eagles—the Atlantic Flyway, Mississippi Flyway, Central Flyway, Pacific Flyway north of 40° north latitude, Pacific Flyway south of 40° north latitude, and Alaska;

(2) Established a bald eagle management objective of maintaining stable or increasing breeding populations in all EMUs, and the persistence of local populations throughout the geographic range;

(3) Used the 20th quantiles of the bald eagle population size estimates for each EMU for permitting purposes and presented those values (use of the 20th quantile of the probability distributions for the population size estimates was a policy decision made by the Service in the 2016 PEIS to conservatively address the uncertainty in the population size estimates to ensure the take limits are compatible with the management objective for bald eagles);

(4) Established a specific take rate for bald eagles in the Pacific Flyway South EMU and a general take rate across the other EMUs that was consistent with the management objective;

(5) Set take limits in each EMU based on the appropriate take rate and the 20th quantile of the EMU population size estimate; and

(6) Established a schedule for conducting eagle surveys and committed to updating population size estimates and, if warranted, take rates and take limits no less than once every 6 years.

The 2016 status report and PEIS used bald eagle count data from 2009 to arrive at a U.S. population estimate of 143,000 bald eagles (20th quantile = 126,000). The schedule established in the PEIS called for the Service to update bald-eagle-population size and take limits in 2022.

However, as part of the 2019 settlement agreement for *Energy and Wildlife Action Coalition v. Department of the Interior et al.* (a case challenging aspects of our authority to issue eagle permits), the Service agreed to expedite the next update of the bald-eagle-population size and appropriate take rate. We completed one new survey of occupied bald eagle nesting territories in the coterminous United States (excluding the Pacific Flyway South EMU, for reasons explained below) in 2019 and have since completed the necessary scientific analyses for the expedited update.

Updated Data and Take Limits

Through this document, we are providing public notice of the updated bald eagle population size, take rate, and take limits used to guide issuance of bald eagle take permits for all but the Alaska and Pacific Flyway South bald eagle EMUs. We did not implement surveys in Alaska because we did not have the financial or logistical resources. In the Pacific Flyway South EMU bald eagles are relatively scarce and patchily distributed, making aerial surveys impractical. Take limits for these two EMUs will remain as reported in the 2016 PEIS until we are able to acquire and conduct separate analyses of new information from these populations.

For this update, we implemented several improvements to the data and models we use to

generate the relevant demographic, population size, and take rate estimates. These changes are discussed in detail in a technical report that can be obtained from <http://www.regulations.gov> in Docket No. FWS–HQ–MB–2020–0138. In brief, we:

(1) Collaborated with the Cornell University Laboratory of Ornithology to use eBird citizen-science information to improve our estimates of the number of occupied bald eagle nesting territories. The Service’s aerial bald eagle nesting territory survey covers areas of the coterminous United States that have high densities of nesting bald eagles, but these surveys are not efficient in, and thus are not conducted in, areas where nests are sparse. However, eBird bald eagle relative abundance estimates are available for nearly all areas in the coterminous United States. For the 2009 bald eagle population size estimate, we used counts of known bald eagle nests provided by State fish and wildlife agencies as a conservative estimate of the number of occupied bald eagle nesting territories outside of the areas covered by the aerial survey. Many States no longer track bald eagle nests, however, so this process was not a viable option for this update. Instead, Cornell Laboratory of Ornithology and Service scientists used aerial survey and eBird relative abundance data from areas where both data types were available to develop a model that accurately predicted bald eagle nest density from eBird relative abundance values. We then used this model to estimate the number of occupied bald eagle nesting territories in 2019 in the Atlantic, Mississippi, Central, and Pacific Flyway North EMUs.

(2) Developed an integrated population model (IPM) to improve the precision of our estimates of demographic rates. IPMs integrate count data (our estimates of the number of occupied nesting territories) and data on survival rates and reproductive rates to produce more precise estimates of population size, survival, and fecundity than would otherwise be possible. These rates are used to estimate the take rate consistent with our management objective and to translate the estimate of the number of occupied nesting territories into a total population size estimate. IPMs also allow for the estimation of demographic parameters for which no explicit data are available in some cases. For bald eagles, one such parameter is the proportion of adults

that breed, and we were able to obtain credible estimates of this parameter from our IPM. This change is important because it allowed us to account for adult “floaters” (i.e., adults not settled on a nesting territory) and thus accurately estimate the total number of adult bald eagles in the population. The IPM provided information on the proportion of the bald eagle population that was in each age class, and so knowing the number of adults allowed us to estimate numbers for the other age classes and thus total population size. In our 2016 eagle status assessment we independently modeled each relevant demographic rate, and thus did not take advantage of the ability to leverage the information that comes with IPMs.

(3) We updated the bald eagle banding data used to estimate survival rates in the IPM to include band recoveries through 2018.

(4) We updated our model for determining take rates and limits for bald eagles based on the new estimates of relevant demographic parameters from the IPM. We also added flexibility to the model to accommodate the type of density dependence that likely regulates bald eagle population size.

Our 2019 estimate of bald eagle population size in the four EMUs is 316,708. However, consistent with the Service’s decision in the 2016 PEIS, we use the 20th quantile of the probability distribution as the relevant value for management purposes, which is 273,327 bald eagles. Although some of the increase in the estimates of population size from 2009 to 2019 can be attributed to improvements in methods, the majority of the increase is likely due to population growth, estimated to be around 10 percent per year. In the 2016 PEIS, we determined that a take rate of 0.06 was consistent with our management objective for bald eagles. Based on updated demographic information and using a more appropriate form of the take-limit model, we have updated our estimate of the appropriate take rate to 0.09. The changes in population size and the take rate result in an annual maximum take limit in the four EMUs of 15,832 bald eagles (see table below). Actual permitted bald eagle take was 490 in 2020, and the higher updated take limits will not in themselves lead to increased take.

TABLE—FORMER AND NEW BALD EAGLE POPULATION SIZE AND TAKE LIMITS BY BALD EAGLE MANAGEMENT UNIT.

Bald Eagle Management Unit	2009 Population Size (20th quantile)	2009 Take Limit	2019 Population Size (20th quantile)	New Take Limits
Atlantic Flyway	20,387	1,223	72,990	4,223
Mississippi Flyway	27,334	1,640	137,917	7,986
Central Flyway	1,163	70	26,253	1,521
Pacific Flyway North	13,296	798	36,302	2,102
Total	62,180	3,731	273,327	15,832

Despite the improvements we made in our models and approach, we have not altered the analytical framework of the 2016 PEIS. Additionally, our update does not alter any of the policy decisions made in the PEIS, and there are no regulatory changes necessary to implement these new take limits. In the 2016 PEIS we specifically anticipated these kinds of periodic updates to the technical information underlying our analytical framework to account for changes in population size and demographic rates that might occur over time. Thus, these updates represent a recalibration of the take limits by applying the same concepts and policy decisions in the 2016 PEIS to updated information on the size and demographic rates of bald eagles in the relevant EMUs. Because this new information constitutes only a technical update of the scientific information in our 2016 PEIS, we have determined that the PEIS itself does not need to be updated or supplemented, nor are any regulatory changes required to implement the update. Consequently, these updated maximum allowable take limits are effective upon publication of this notice.

Martha Williams,
Principal Deputy Director,
Exercising the Delegated Authority of the Director,
U.S. Fish and Wildlife Service.

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